ABSTRACT

An output regulator to convert an input voltage to a regulated output. The output regulator including a power stage to generate a power output from the input voltage. An output filter to filter the power output to generate the regulated output. An output sensor to generate a digital sense signal to indicate within which of at least three reference ranges the regulated output is included. Each of the at least three reference ranges including a plurality of possible values of the regulated output. A digital controller, responsive to the digital sense signal, to generate a drive signal to control the power stage.